

Amendments to the claims

This listing of claims will replace all the prior revisions, and listings of claims in this application.

Listing of Claims

- 1 1. (Currently amended) A method for configuring a portable and/or mobile host that powers up in a foreign network to connect to the Internet, comprising the steps of
 - 3 creating a bootstrapping agent in a home network that works cooperatively with a
 - 4 Mobile IP home agent to initially allocate a temporary home address to said portable and/or
 - 5 mobile host that powers up in a foreign network,
 - 6 the portable and/or mobile host using the Mobile IP protocol to contact said Mobile
 - 7 IP home agent and request said bootstrapping agent to allocate said temporary home address
 - 8 to said portable and/or mobile host while the mobile host is in the foreign network, and
 - 9 using in the foreign network, said temporary home address to create a temporary
 - 10 tunnel between a foreign agent associated with said portable and/or mobile host and said
 - 11 Mobile IP home agent, wherein said temporary tunnel is used to communicate configuration
 - 12 information including a permanent home address allocated by a Dynamic Host Configuration
 - 13 Protocol (DHCP) protool server between the portable and/or mobile host and [[a]] its home
 - 14 network of the portable and/or mobile host, when the portable and/or mobile host powers up
 - 15 in the foreign network, thereby allowing the portable and/or mobile host that powers up in a
 - 16 foreign network to connect to the Internet.
- 1 2. (Original) The method of claim 1 wherein said foreign agent is co-located with said
- 2 mobile host.
- 1 3. (Original) The method of claim 1 wherein said foreign agent is located on a device that is
- 2 external to said mobile host and resides in said foreign network.

- 1 4. (Original) The method of claim 1 wherein said bootstrapping agent is arranged to assign
- 2 IP addresses from an address pool of private addresses.

- 1 5. (Previously presented) The method of claim 4 wherein private addresses are in the format
- 2 10.*.

- 3 6. (Original) The method of claim 1 wherein said bootstrapping agent is arranged to assign
- 4 IP addresses from an address pool of public addresses.

- 1 7. (Currently amended) The method of claim 1 wherein a DHCP client located on said
- 2 portable and/or mobile host is used to generate messages requesting said configuration
- 3 information from [[a]] the DHCP server via said temporary tunnel.

- 1 8. (Original) The method of claim 7 wherein said messages generated by said DHCP client
- 2 are modified at said portable and/or mobile host to have a format consistent with a DHCP
- 3 relay.

- 1 9. (Currently amended) A method for enabling a mobile host without an IP home address
- 2 while in a foreign network, to connect to the Internet when powering up in [[a]] the foreign
- 3 network, comprising the steps of:
 - 4 obtaining a temporary IP home address for said mobile host powering up in [[a]] the
 - 5 foreign network without an IP home address from [[an]] a temporary IP address source
 - 6 accessible through a bootstrapping agent that works cooperatively with a mobile IP home
 - 7 agent,

8 establishing a transient tunnel between said mobile IP home agent and a mobile IP
9 foreign agent associated with said mobile host while the mobile host is in said foreign
10 network, using said temporary IP home address,

11 acquiring, via said transient tunnel, configuration parameters including a
12 permanent IP home address from a Dynamic Host Configuration Protocol (DHCP)
13 server located in the home network of said mobile host, and

14 replacing said transient tunnel with a new tunnel between said mobile IP home
15 agent and said mobile IP foreign agent using said permanent IP home address,
16 thereby allowing a mobile host without an IP home address to connect to the Internet
17 when powering up in [[a]] the foreign network.

1 10. (Currently amended) A method for enabling configuration of a portable host device that
2 powers up in a foreign network to communicate using the Internet, said method comprising
3 the steps of:

4 communicating a temporary home address to said portable host device that powers up
5 in a foreign network, from a bootstrapping agent operating cooperatively with a mobile IP
6 home agent that serves said portable host device ~~when it operates in said foreign network~~,

7 establishing a transient bidirectional communication link between said portable host
8 device when the portable host device is in the foreign network, and said mobile IP home
9 agent using the Mobile IP protocol and said temporary home address, and

10 obtaining a permanent address from a Dynamic Host Configuration Protocol (DHCP)
11 server via said transient bidirectional communication link, wherein said permanent address is
12 used thereafter to configure said portable host that powers up in [[a]] the foreign network, to
13 communicate with the Internet.

1 11. (Original) The method defined in claim 10 wherein additional configuration parameters
2 are provided to said portable host device via said transient bidirectional communication link.

1 12. (Cancelled)

- 1 13. (Currently amended) A method for configuring a mobile host that powers up in a foreign
- 2 network, comprising:
 - 3 setting up a temporary IP tunnel via the Mobile IP protocol to connect said mobile
 - 4 host to its home network while the mobile host is in the foreign network,
 - 5 using an IP broadcasting protocol over said temporary IP tunnel so that said mobile
 - 6 host can discover a Dynamic Host Configuration Protocol (DHCP) addressing server in its
 - 7 home network, and
 - 8 using the DHCP protocol to communicate addressing and configuration information
 - 9 between said addressing server and said mobile host while the mobile host is in the foreign
 - 10 network.
- 1 14. (Previously presented) In a system arranged to use an IP tunnel to relay via the Internet
- 2 communication packets that are destined to a mobile host from a home server in said host's
- 3 home network to a foreign server when said host is in a foreign network, wherein the
- 4 establishment of said IP tunnel requires said home server and foreign server to know [[the]] a
- 5 permanent IP home address of said mobile host, a method for configuring said mobile host
- 6 when it powers up in said foreign network without said IP home address, comprising the
- 7 steps of
 - 8 obtaining a temporary IP home address for said mobile host from an IP address
 - 9 source accessible through said home server,
 - 10 establishing a transient tunnel between said home server and said foreign server using
 - 11 said temporary IP home address while the host is in the foreign network,
 - 12 acquiring, via said transient tunnel, permanent configuration parameters including
 - 13 [[a]] the permanent IP home address from a DHCP server located in a region served by said
 - 14 home server while the host is in the foreign network,
 - 15 replacing said transient tunnel with a new tunnel between said home server and said
 - 16 foreign server using said permanent IP home address.